

10/513699

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NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	DEC 01	ChemPort single article sales feature unavailable
NEWS	3	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS	4	APR 07	STN is raising the limits on saved answers
NEWS	5	APR 24	CA/CAPLUS now has more comprehensive patent assignee information
NEWS	6	APR 26	USPATFULL and USPAT2 enhanced with patent assignment/reassignment information
NEWS	7	APR 28	CAS patent authority coverage expanded
NEWS	8	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS	9	APR 28	Limits doubled for structure searching in CAS REGISTRY
NEWS	10	MAY 08	STN Express, Version 8.4, now available
NEWS	11	MAY 11	STN on the Web enhanced
NEWS	12	MAY 11	BEILSTEIN substance information now available on STN Easy
NEWS	13	MAY 14	DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format
NEWS	14	MAY 15	INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
NEWS	15	MAY 28	CAS databases on STN enhanced with NANO super role in records back to 1992
NEWS	16	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:08:14 ON 12 JUN 2009

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

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SESSION

FULL ESTIMATED COST

0.22

0.22

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Property values tagged with IC are from the ZIC/VINITI data file
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STRUCTURE FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5

DICTIONARY FILE UPDATES: 10 JUN 2009 HIGHEST RN 1155458-91-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

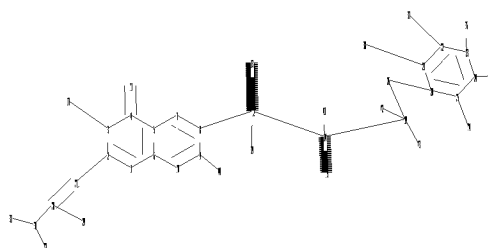
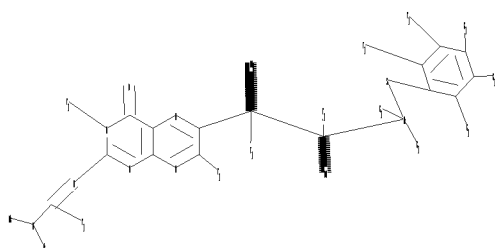
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10579106thioether.str

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```
chain nodes :
11 12 13 14 15 17 19 26 27 28 29 30 31 32 34 35 36 37 38 39 41
42 43 44
ring nodes :
1 2 3 4 5 6 7 8 9 10 20 21 22 23 24 25
chain bonds :
2-27 3-17 4-11 8-12 9-44 12-13 12-14 12-39 14-15 14-19 14-41 19-26
19-42 19-43 20-26 21-38 22-37 23-36 24-35 25-34 27-28 28-29 28-30 30-31
30-32
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 20-25 20-21 21-22 22-23
23-24 24-25
exact/norm bonds :
1-2 1-6 2-3 2-27 3-4 3-17 4-5 4-11 9-44 12-13 12-39 14-15 14-19 14-41
19-26 19-42 19-43 20-26 21-38 22-37 23-36 24-35 25-34 27-28 28-29 28-30
30-31 30-32
exact bonds :
8-12 12-14
normalized bonds :
5-6 5-7 6-10 7-8 8-9 9-10 20-25 20-21 21-22 22-23 23-24 24-25
isolated ring systems :
containing 1 : 20 :
```

G1:C,H

```
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 19:CLASS 20:Atom
21:CLASS 22:Atom 23:Atom 24:Atom 25:Atom 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS
38:CLASS 39:CLASS 41:CLASS 42:CLASS 43:CLASS 44:CLASS
```

<12/04/2007>

Erich Leese

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L1 STRUCTURE UPLOADED

=> s l1

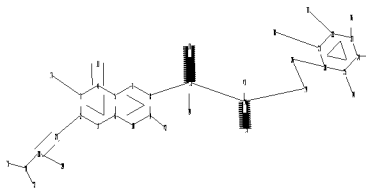
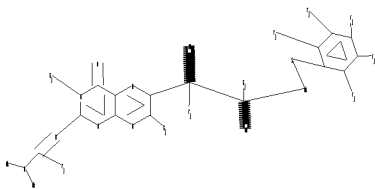
GENERIC GROUP NOT VALID HERE

Generic groups may not be used in these circumstances:

1. Any generic group node (e.g., Hy) in a ring.
2. An Ak node attached to another Ak node.
3. An Ak node with three or more attachments where one or more of the attachments is to a C node.

=>

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chain nodes :

11 12 13 14 15 17 19 26 27 28 29 30 31 32 34 35 36 37 38 39 41
42

ring nodes :

1 2 3 4 5 6 7 8 9 10 20 21 22 23 24 25

chain bonds :

2-27 3-17 4-11 8-12 9-42 12-13 12-14 12-39 14-15 14-19 14-41 19-26
20-26 21-38 22-37 23-36 24-35 25-34 27-28 28-29 28-30 30-31 30-32

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10 20-25 20-21 21-22 22-23
23-24 24-25

exact/norm bonds :

1-2 1-6 2-3 2-27 3-4 3-17 4-5 4-11 9-42 12-13 12-39 14-15 14-19 14-41
19-26 20-26 21-38 22-37 23-36 24-35 25-34 27-28 28-29 28-30 30-31 30-32

exact bonds :

8-12 12-14

normalized bonds :

5-6 5-7 6-10 7-8 8-9 9-10 20-25 20-21 21-22 22-23 23-24 24-25

isolated ring systems :

containing 1 : 20 :

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G1:C,H

Match level :

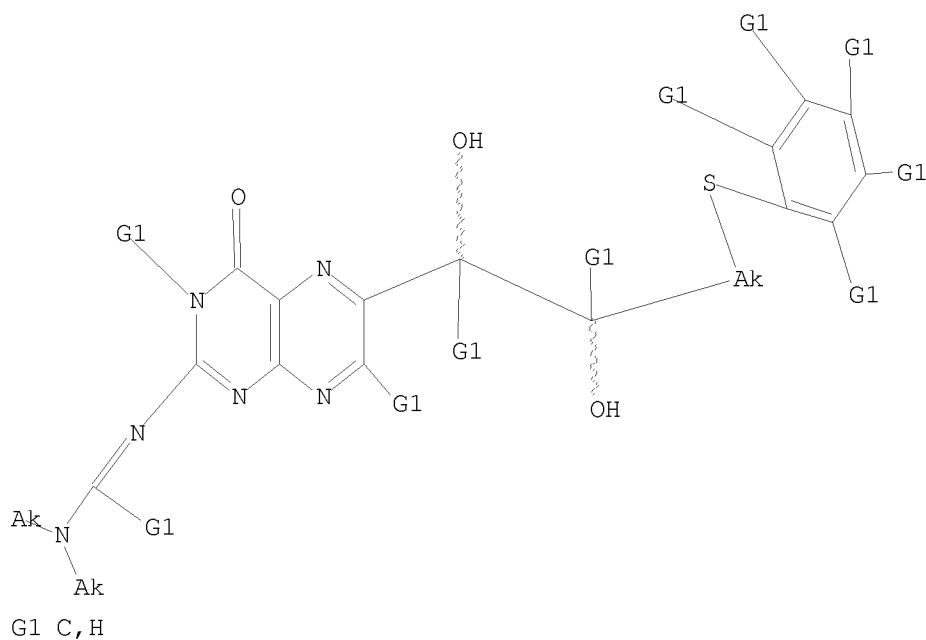
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 19:CLASS 20:Atom
21:CLASS 22:Atom 23:Atom 24:Atom 25:Atom 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS
38:CLASS 39:CLASS 41:CLASS 42:CLASS

L2 STRUCTURE UPLOADED

=> d 12

L2 HAS NO ANSWERS

L2 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 12 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 185.40 U.S. DOLLARS

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FULL SEARCH INITIATED 15:10:14 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L2

<12/04/2007>

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=> file caplus

COST IN U.S. DOLLARS

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186.84

187.06

FILE 'CAPLUS' ENTERED AT 15:10:22 ON 12 JUN 2009

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FILE COVERS 1907 - 12 Jun 2009 VOL 150 ISS 25

FILE LAST UPDATED: 11 Jun 2009 (20090611/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3 full

L4 1 L3

=> d ibib abs hitstr

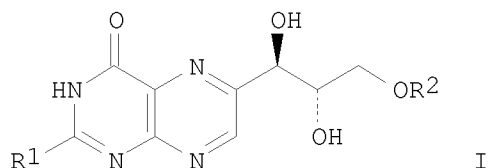
THE ESTIMATED COST FOR THIS REQUEST IS 5.64 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

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L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:472157 CAPLUS
DOCUMENT NUMBER: 143:7534
TITLE: Preparation of tetrahydrobiopterin and analogs of
tetrahydrobiopterin
INVENTOR(S): Moser, Rudolf; Groehn, Viola; Schumacher, Andreas;
Martin, Pierre
PATENT ASSIGNEE(S): Biomarin Pharmaceutical Inc., USA; Merck Eprova A.-G.
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005049614	A2	20050602	WO 2004-US38313	20041117
WO 2005049614	A3	20070308		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004290692	A1	20050602	AU 2004-290692	20041117
CA 2545484	A1	20050602	CA 2004-2545484	20041117
EP 1776364	A2	20070425	EP 2004-819154	20041117
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, HR, LT, LV, MK, YU			
JP 2007534637	T	20071129	JP 2006-539994	20041117
US 20070244322	A1	20071018	US 2007-579106	20070216
PRIORITY APPLN. INFO.:			US 2003-520367P	P 20031117
			US 2003-520368P	P 20031117
			WO 2004-US38313	W 20041117
OTHER SOURCE(S):	CASREACT 143:7534; MARPAT 143:7534			
GI				



AB A process for the preparation of tetrahydrobiopterin and its analogs, e.g. I
[R1 = alkylamino, arylamino, alkylthio, alkylaminomethyleneimino, R2 = H;
R1 = alkylamino, alkylthio, Me2NCH=N, R2 = Me2CHEt2Si, (Me3CO)Ph2Si,

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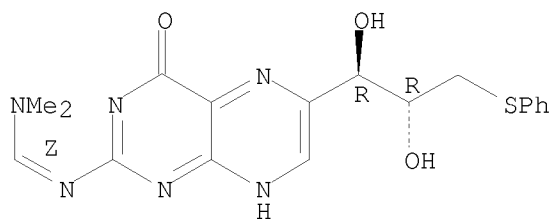
MePh₂Si, Me₃CMe₂Si, Me₃C(MeO)PhSi, (Me₃C)₂MeSi, etc.], from neopterin and/or 6-substituted pterins with an improved yield and a high stereoselectivity is disclosed. Also disclosed herein are novel individual intermediates prepared in the preparation of tetrahydrobiopterin, such as selectively protected neopterin useful for the preparation of tetrahydrobiopterin. As an example, L-neopterin was reacted with DMF-acetal to give the 2-(dimethylamino)methylene derivative I (R₁ = Me₂NCH:N, R₂ = H) (II). II was then silylated to I (R₂ = Me₃CPh₂Si) which could be deprotected to I (R₁ = NH₂).

IT 852547-49-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of tetrahydrobiopterin and analogs)

RN 852547-49-0 CAPLUS

CN Methanimidamide, N'-[6-[(1R,2R)-1,2-dihydroxy-3-(phenylthio)propyl]-1,4-dihydro-4-oxo-2-pteridinyl]-N,N-dimethyl-, (1Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



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=> d his

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FILE 'REGISTRY' ENTERED AT 15:08:28 ON 12 JUN 2009

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

L3 1 S L2 FULL

FILE 'CAPLUS' ENTERED AT 15:10:22 ON 12 JUN 2009

L4 1 S L3 FULL

=> log y

COST IN U.S. DOLLARS

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TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

6.14

193.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

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SESSION

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STN INTERNATIONAL LOGOFF AT 15:10:43 ON 12 JUN 2009